

## **REMARKS**

### **Claim Rejections under 35 USC § 103**

The Examiner has rejected claims 1, 4, 7, 8, 11, and 14 under 35 USC § 103(a) as being unpatentable over Kawamura (2002/0069141) in view of Beal (6,634,506). It is the Examiner's position Kawamura teaches calculating a container allocation quantity for each supplier, determining a supplier on-hand inventory for each supplier, determining an actual container quantity for each supplier based on the container allocation quantity and on-hand inventory, and shipping an actual number of containers from a container inventory holding area. The Examiner states that Beal teaches creating a container inventory holding area and storing containers suitable for a plurality of suppliers.

The Examiner has rejected claims 2, 3, 9, and 10 under 35 USC § 103(a) as being unpatentable over Kawamura (2002/0069141) in view of Beal (6,634,506) in further view of Peachey-Kountz (6,463,345). It is the Examiner's position that Peachey-Kountz teaches a standard allocated days value, determining a process flow of containers, and determining a parts demand value.

The Examiner has rejected claims 5, 6, 12, and 13 under 35 USC § 103(a) as being unpatentable over Kawamura (2002/0069141) in view of Beal (6,634,506) in further view of Griep (2003/0014314). It is the Examiner's position that Griep teaches supplier on-hand inventory comprising empty, full, and in-transit containers.

Applicant has amended the claims to indicate more clearly that the present invention relates to allocating containers to suppliers in number adequate to meet a

manufacturer's demand for parts from the suppliers according to the manufacturer's production schedule. In particular, the claims have been amended to indicate that:

- (1) the manufacturer's production schedule is used to determine a parts demand value for each supplier;
- (2) a supplier's on-hand container inventory is determined for each supplier;
- (3) a container allocated days number is determined for each supplier based on a number of days a container remains in a supplier's on-hand container inventory;
- (4) a container allocation quantity is determined for each supplier based on the supplier's parts demand value and container allocated days number;
- (5) an actual container quantity is determined for each supplier based on the supplier's container allocation quantity and the supplier's on-hand container inventory quantity; and
- (6) the actual container quantity number is used to determine the number of containers to ship to the supplier.

In view of Applicant's amended claims, Applicant respectfully traverses the rejections.

Kawamura teaches "returnable container-returning notices" that are issued by a manufacturer to a merchandiser. In Kawamura, the manufacturer is the supplier of products to a merchandiser. The return notices are generated by a server that determines whether the number of containers in the manufacturer's inventory is below a "pre-determined value." (Para. 00012). If it is, the merchandiser is asked to return containers to the manufacturer.

In Kawamura, containers are returned to the manufacturer at the request of the supplier based on a perceived need evidenced by a number falling below a certain threshold. Containers are not allocated to suppliers; they are simply returned when a return notice is sent to a merchandiser. Applicant respectfully submits that contrary to the Examiner's assertion, Kawamura does not teach allocating containers to suppliers so that suppliers have an adequate supply of containers for the parts they will be asked to ship to the manufacturer. More importantly, Kawamura does not teach determining an appropriate container allocation based a parts demand value related to the manufacturer's production schedule and a container allocated days number, comparing the determined container allocation to the supplier's on-hand inventory, and then supplying the number of containers needed to meet the supplier's allocation. Applicant respectfully submits the amended claims clearly distinguish over Kawamura with regard to container allocation and that Kawamura cannot be combined with the other cited references to reject the amended claims.

With respect to the features of the present invention related to container allocated days and a parts demand value, it is the Examiner's position such teachings are found in Peachey-Kountz. The Examiner relies on tables on Peachey-Kountz that relate to supply allocations to teach "standard allocated days values." The tables relate to allocations of items other than containers. Applicant respectfully submits that supply allocations as taught by Peachey-Kountz bear no relationship to "standard allocated days values" as described in the present application. Applicant has further amended the claims to indicate more clearly that a "container allocated days number" is determined for each supplier based on a number of days a container remains in a

supplier's on-hand container inventory. Applicant respectfully submits that none of the cited references, including Peachey-Kountz have any teachings related to determining "container allocated days number" which indicates the number of days a container remains in a supplier's on-hand container inventory.

The Examiner relies on the Abstract and Col. 1, ll. 21-28 of Peachey-Kountz to teach a parts demand value. However, the cited passages state only that determining parts demand is difficult and that the invention described in the patent analyzes product requests to determine product demand. Applicant has amended claims 1 and 8 to indicate that a parts demand value is based on the manufacturer's actual parts requirements based on a production schedule. Applicant respectfully submits that "product demand" in Peachey-Kountz does not relate in any way to manufacturer production schedules and does not relate to parts demand values based on actual part requirements based on a production schedule.

The Examiner finally takes Official Notice that it would have been obvious to one of ordinary skill in the art to disclose multiplying "said standard allocated days value by said parts demand value for each of said plurality of suppliers" to give "total demand." Applicant has amended the claims to indicate that a container allocation quantity is determined for each supplier based on the supplier's parts demand value and container allocated days number. Applicant respectfully objects to the Examiner's reliance on Official Notice and respectfully requests that the Examiner provide evidence that the prior art teaches determining a container allocation quantity based on a parts demand and a number of container allocated days.

With respect to rejected claims 5, 6, 12, and 13, the Examiner asserts that Griep teaches including empty, full, and/or in-transit containers in an on-hand inventory. Applicant respectfully submits that Griep teaches container replenishment but has no relation to managing inventories of containers and furthermore, does not teach or even suggest including empty, full, and/or in-transit containers in an inventory. For example, in cited paragraph 0068, Griep teaches “[d]etermining when to trigger a replenishment signal is vital to a demand-based replenishment system. ... This signals a handler to replenish the container.” Applicant respectfully submits that Griep’s teachings related to replenishing the contents of containers has nothing to do with whether they are counted in an inventory of containers. Therefore, Griep is deficient with respect to the asserted teaching and cannot be combined with the other references to support rejection of the claims.

Support for Applicant's amended claims is found in the following passages:

Claim Language	Support in Specification
the manufacturer's production schedule is used to determine a parts demand value for each supplier	[0038] Allocation of containers is based on actual part requirements. The manufacturer uses its production schedule to determine its need for parts over a given time period (e.g., for a week). ... The number of containers to be released to the supplier (calculated allocation quantity) is then based on the parts requirements from the supplier orders and the supplier parameter (number of days the containers are on the supplier's side of allotment). ... Allocation of containers to suppliers is based on order system data 198 regarding the parts that have been ordered from each supplier according to the manufacturer's production schedule.

Claim Language	Support in Specification
<p>a supplier's on-hand container inventory is determined for each supplier</p>	<p>[0036] . First, the designated supplier on-hand quantity 120 is verified by the supplier 130. The supplier on-hand quantity 120 includes empties ready for production, full containers waiting for shipment, and partials that may be used for small lot packing. Next, the in-transit full quantity 122 representing containers shipped from the supplier to the designated manufacturer is determined based on electronic data interchange (EDI) part supply order information sent by the supplier 132. The transfer of container inventory from the supplier in-transit full 122 to the designated manufacturer on-hand 124 is determined next. The manufacturer on-hand quantity 124 includes full containers waiting for assembly line side delivery, empties being processed at the RCC, and partials waiting assembly line side or in repack areas. Additional in-bound shipments or receipts (initial receipt function 136) as well as out-bound shipments (load destination RCC/supplier 140) are also considered in determining a designated manufacturer on-hand quantity 124. An in-transit empty quantity based on a container shipment from the designated manufacturer directly to the supplier reduces the on-hand inventory 146. Shipment receipts into the RCM system may be based on a transfer of inventory 144 from the designated manufacturer on-hand 124 to the RCC 126 to trigger a reduction of designated manufacturer on-hand inventory. Finally, in-transit empty quantity 128 to the supplier on-hand quantity 120 is determined 148 as well as receipt into the supplier's on-hand inventory 120 (transfer inventory from RCC/designated manufacturer on-hand to supplier 150 ) and receipt into a special area (transfer inventory from RCC on-hand to designated manufacturer on-hand 152). The in-transit empty quantity 128 is based on empty containers that have shipped and are still in route to a supplier and containers in route to a supplier with return parts.</p>
<p>a container allocated days number is determined for each supplier based on a number of days a container remains in a supplier's on-hand container inventory</p>	<p>[0039] Historical data regarding the time required by the supplier to produce and transport the parts to the manufacturer and for the manufacturer to consume the parts 192 are analyzed to determine a total day supply 196 for use in determining container allocations. For example, if it takes four days to transport containers between the supplier's facility and the manufacturer's facility (two days parts in transit and two days on-hand at manufacturer), three days for the supplier to produce the parts and load the containers (three days on-hand at supplier's facility), and two days for the manufacturer to consume the parts and prepare the containers to be returned to the supplier (two days on-hand at manufacturer's facility), then the total day supply is nine days 196. A "supplier parameter" or "standard allocated days" 194 of seven days represents the number of days that the container is in the supplier's inventory (whether in-transit or at the supplier's location).</p>

Claim Language	Support in Specification
a container allocation quantity is determined for each supplier based on the supplier's parts demand value and container allocated days number;	[0039] The number of containers to be released to the supplier (calculated allocation quantity) is then based on the parts requirements from the supplier orders and the supplier parameter (number of days the containers are on the supplier's side of allotment).
an actual container quantity is determined for each supplier based on the supplier's container allocation quantity and the supplier's on-hand container inventory quantity; and	[0039] The actual number of containers released is based on the calculated allocation quantity less the supplier on-hand quantity on the supplier's side. Using data from the order system 198, the RCM system 200 calculates a "standard allocated days" value for each supplier that is used to determine the calculated allocation quantity for each supplier.

## **Conclusion**

Applicant respectfully submits that the Kawamura reference, alone or combined with the other cited references, cannot support rejection of the claims as amended.

Applicant respectfully submits the present application is in condition for allowance.

Respectfully submitted,

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